FIG.1

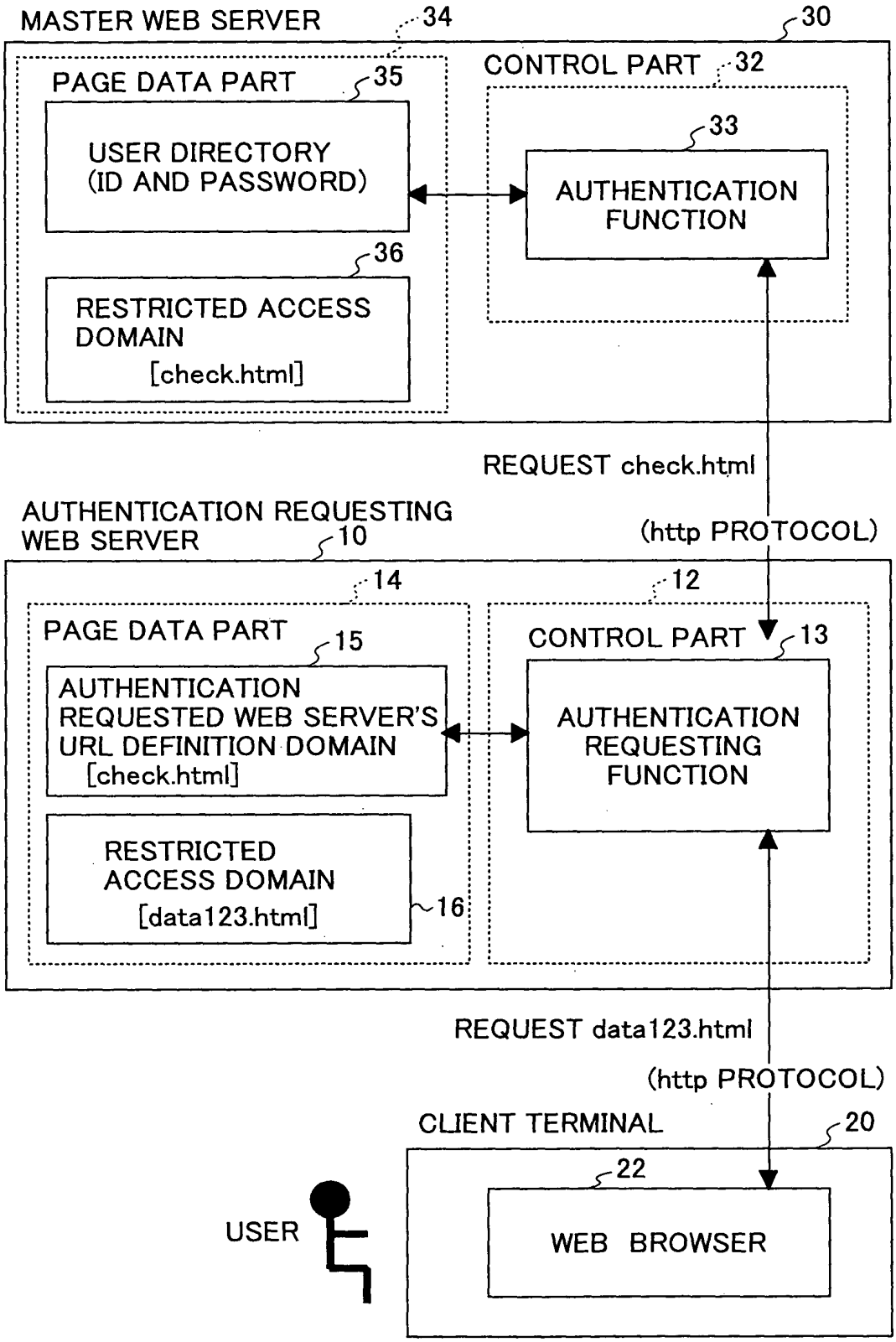
MASTER WEB SERVER
34
30
PAGE DATA PART
35
CONTROL PART
32
USER DIRECTORY
(ID AND PASSWORD)
33
AUTHENTICATION
FUNCTION
36
RESTRICTED ACCESS
DOMAIN
[check.html]
REQUEST check.html
(http PROTOCOL)
AUTHENTICATION REQUESTING
WEB SERVER
10
14
12
PAGE DATA PART
15
CONTROL PART
13
AUTHENTICATION
REQUESTED WEB SERVER'S
URL DEFINITION DOMAIN
[check.html]
AUTHENTICATION
REQUESTING
FUNCTION
RESTRICTED
ACCESS DOMAIN
[data123.html]
16
REQUEST data123.html
(http PROTOCOL)
CLIENT TERMINAL
20
22
USER
WEB BROWSER

FIG.2

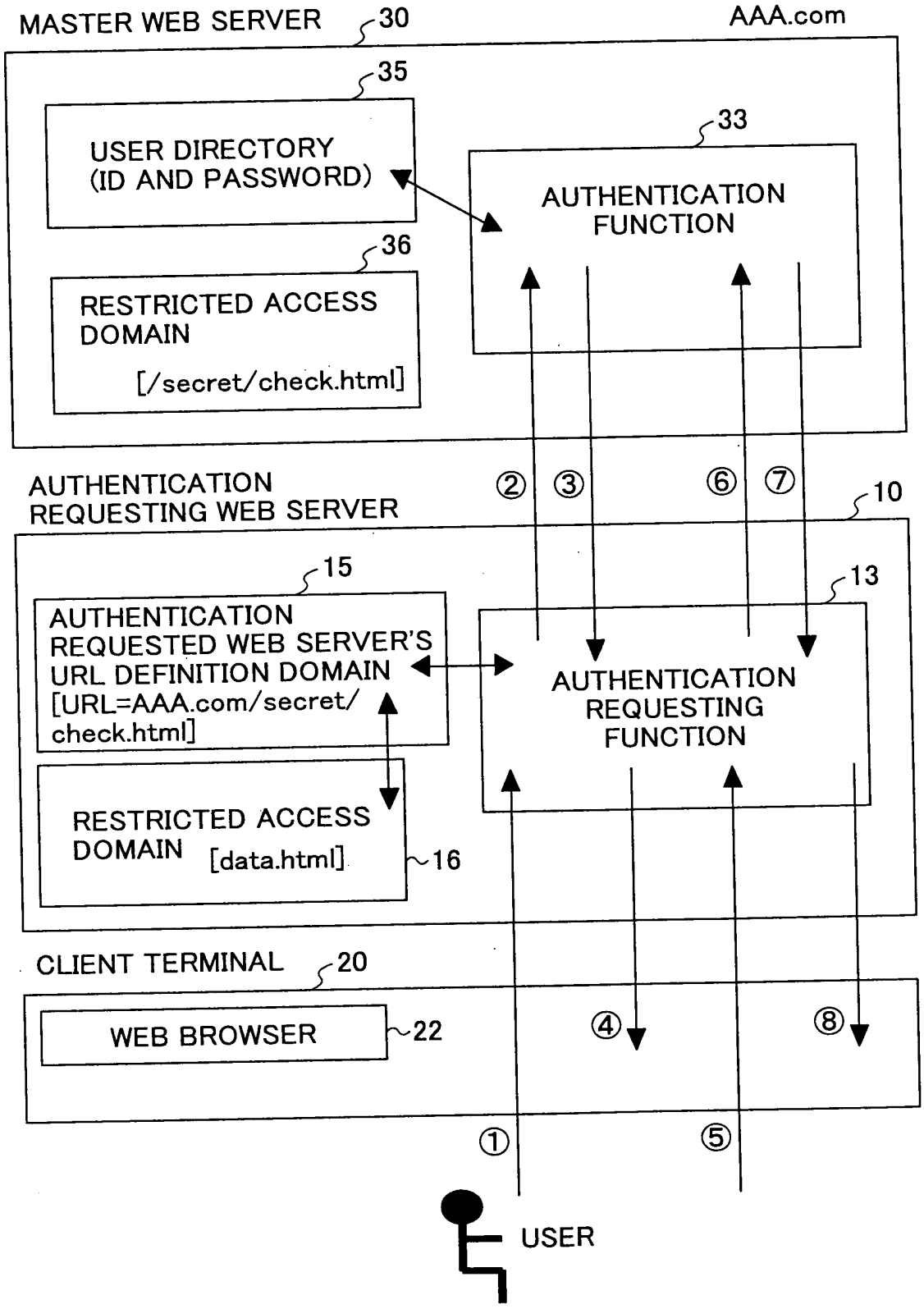
MASTER WEB SERVER
30
AAA.com
35
USER DIRECTORY
(ID AND PASSWORD)
33
AUTHENTICATION
FUNCTION
36
RESTRICTED ACCESS
DOMAIN
[/secret/check.html]
AUTHENTICATION
REQUESTING WEB SERVER
②
③
⑥
⑦
10
15
AUTHENTICATION
REQUESTED WEB SERVER'S
URL DEFINITION DOMAIN
[URL=AAA.com/secret/
check.html]
13
AUTHENTICATION
REQUESTING
FUNCTION
RESTRICTED ACCESS
DOMAIN
[data.html]
16
CLIENT TERMINAL
20
WEB BROWSER
22
④
⑧
①
⑤
USER

FIG.3

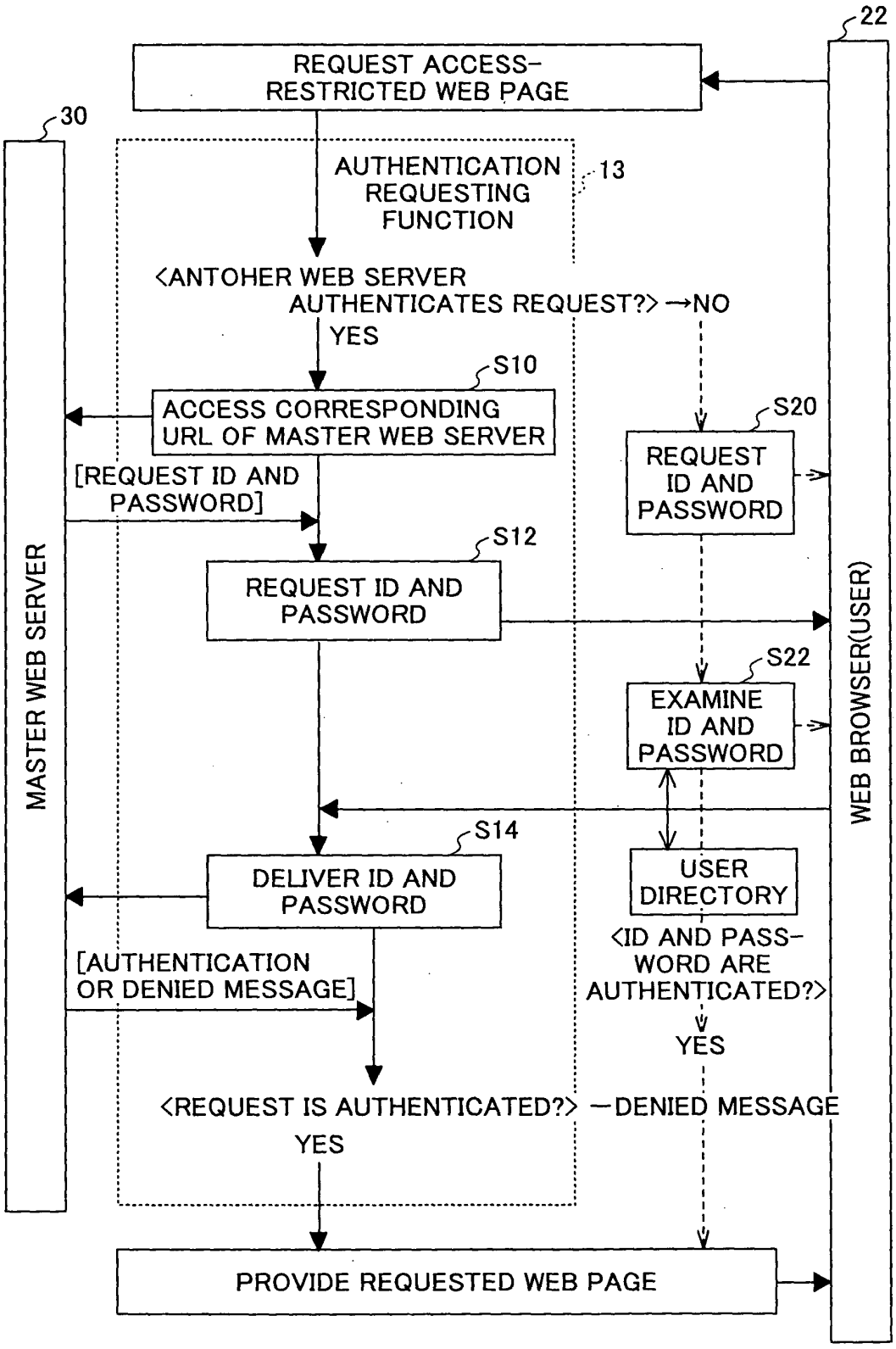
22
REQUEST ACCESS-RESTRICTED WEB PAGE
30
AUTHENTICATION REQUESTING FUNCTION
13
<ANTOHER WEB SERVER AUTHENTICATES REQUEST?>
NO
YES
S10
ACCESS CORRESPONDING URL OF MASTER WEB SERVER
S20
REQUEST ID AND PASSWORD
[REQUEST ID AND PASSWORD]
S12
REQUEST ID AND PASSWORD
S22
EXAMINE ID AND PASSWORD
MASTER WEB SERVER
WEB BROWSER(USER)
S14
DELIVER ID AND PASSWORD
USER DIRECTORY
[AUTHENTICATION OR DENIED MESSAGE]
<ID AND PASS-WORD ARE AUTHENTICATED?>
YES
<REQUEST IS AUTHENTICATED?>
DENIED MESSAGE
YES
PROVIDE REQUESTED WEB PAGE

FIG.4

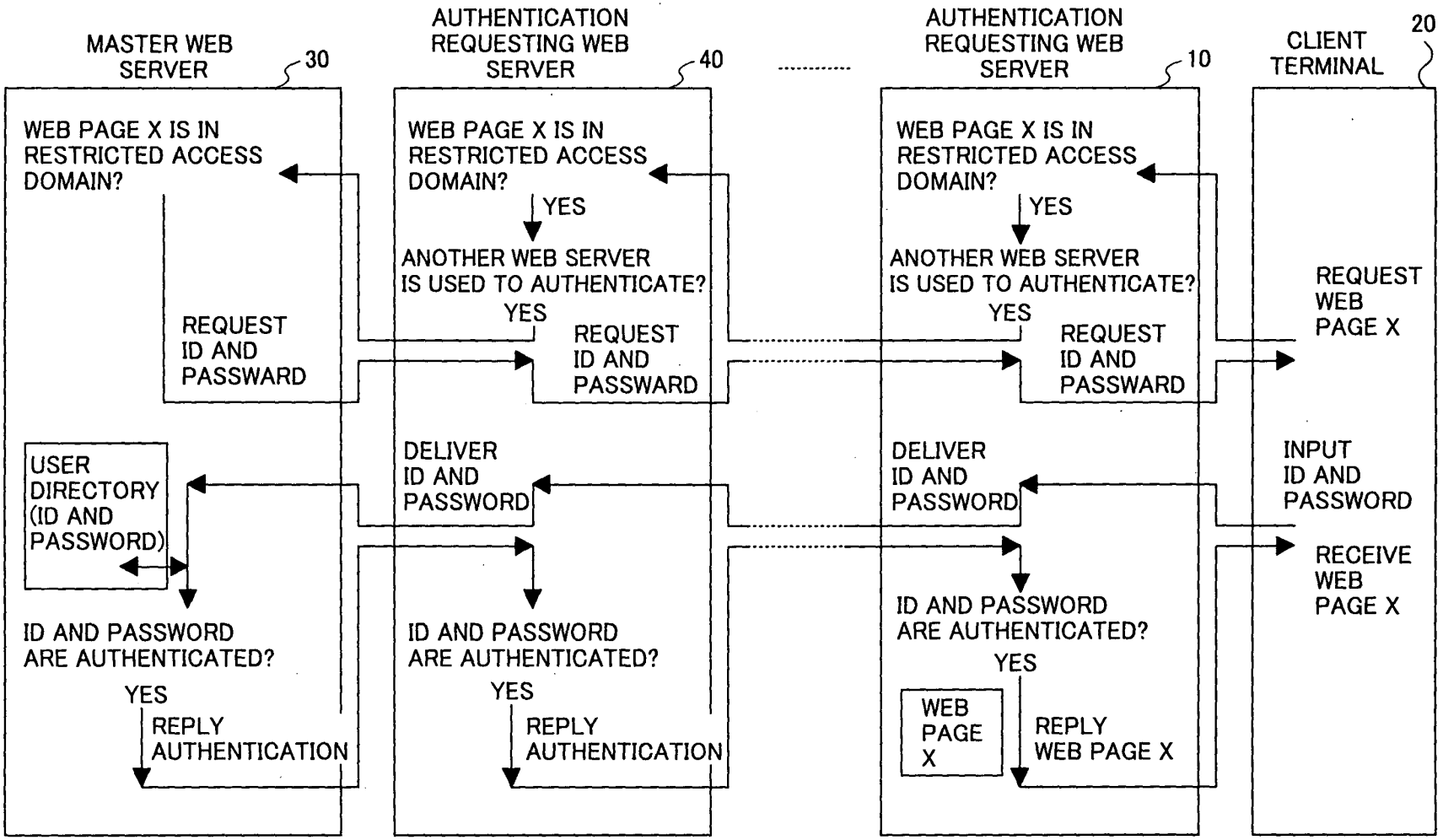
MASTER WEB SERVER
30
AUTHENTICATION REQUESTING WEB SERVER
40
AUTHENTICATION REQUESTING WEB SERVER
10
CLIENT TERMINAL
20
WEB PAGE X IS IN RESTRICTED ACCESS DOMAIN?
YES
ANOTHER WEB SERVER IS USED TO AUTHENTICATE?
YES
REQUEST ID AND PASSWARD
REQUEST ID AND PASSWARD
REQUEST ID AND PASSWARD
REQUEST WEB PAGE X
USER DIRECTORY (ID AND PASSWORD)
DELIVER ID AND PASSWORD
DELIVER ID AND PASSWORD
INPUT ID AND PASSWORD
RECEIVE WEB PAGE X
ID AND PASSWORD ARE AUTHENTICATED?
YES
REPLY AUTHENTICATION
ID AND PASSWORD ARE AUTHENTICATED?
YES
REPLY AUTHENTICATION
ID AND PASSWORD ARE AUTHENTICATED?
YES
WEB PAGE X
REPLY WEB PAGE X

FIG.5

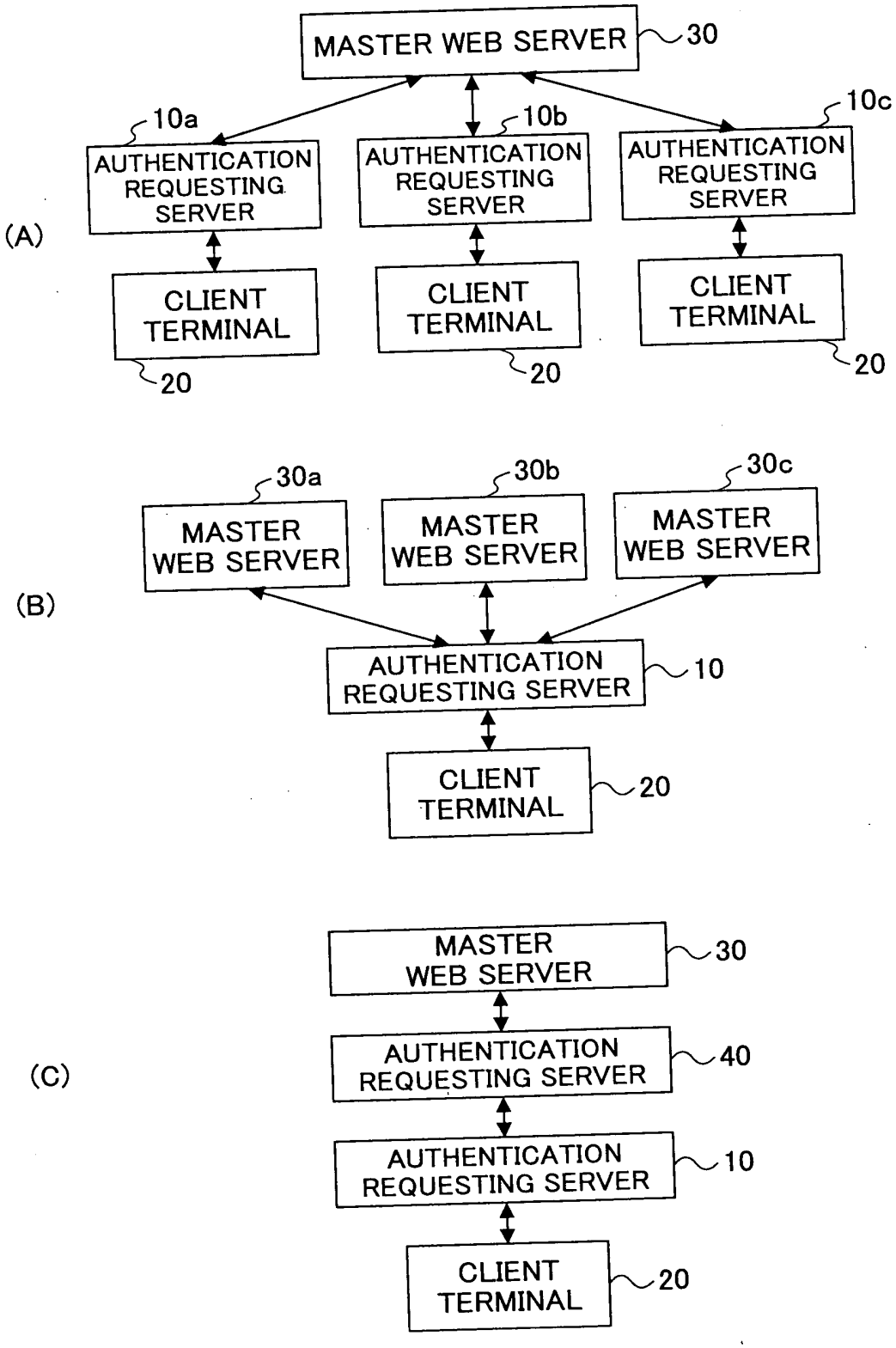
(A)
MASTER WEB SERVER
30
10a
10b
10c
AUTHENTICATION REQUESTING SERVER
AUTHENTICATION REQUESTING SERVER
AUTHENTICATION REQUESTING SERVER
CLIENT TERMINAL
CLIENT TERMINAL
CLIENT TERMINAL
20
20
20
(B)
30a
30b
30c
MASTER WEB SERVER
MASTER WEB SERVER
MASTER WEB SERVER
AUTHENTICATION REQUESTING SERVER
10
CLIENT TERMINAL
20
(C)
MASTER WEB SERVER
30
AUTHENTICATION REQUESTING SERVER
40
AUTHENTICATION REQUESTING SERVER
10
CLIENT TERMINAL
20

FIG.6

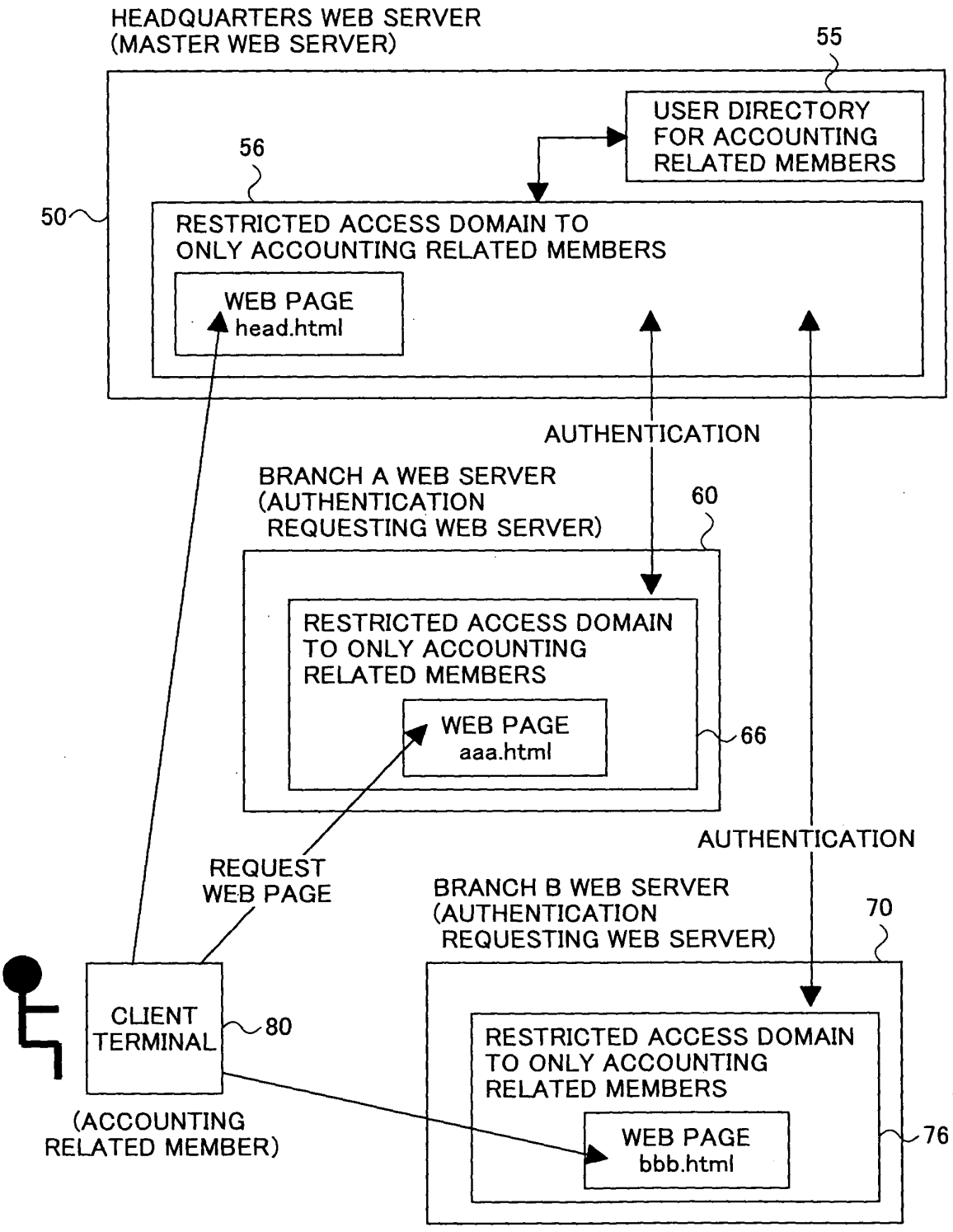
HEADQUARTERS WEB SERVER
(MASTER WEB SERVER)
55
USER DIRECTORY
FOR ACCOUNTING
RELATED MEMBERS
56
50
RESTRICTED ACCESS DOMAIN TO
ONLY ACCOUNTING RELATED MEMBERS
WEB PAGE
head.html
AUTHENTICATION
BRANCH A WEB SERVER
(AUTHENTICATION
REQUESTING WEB SERVER)
60
RESTRICTED ACCESS DOMAIN
TO ONLY ACCOUNTING
RELATED MEMBERS
WEB PAGE
aaa.html
66
AUTHENTICATION
REQUEST
WEB PAGE
BRANCH B WEB SERVER
(AUTHENTICATION
REQUESTING WEB SERVER)
70
CLIENT
TERMINAL
80
RESTRICTED ACCESS DOMAIN
TO ONLY ACCOUNTING
RELATED MEMBERS
WEB PAGE
bbb.html
76
(ACCOUNTING
RELATED MEMBER)

FIG.7

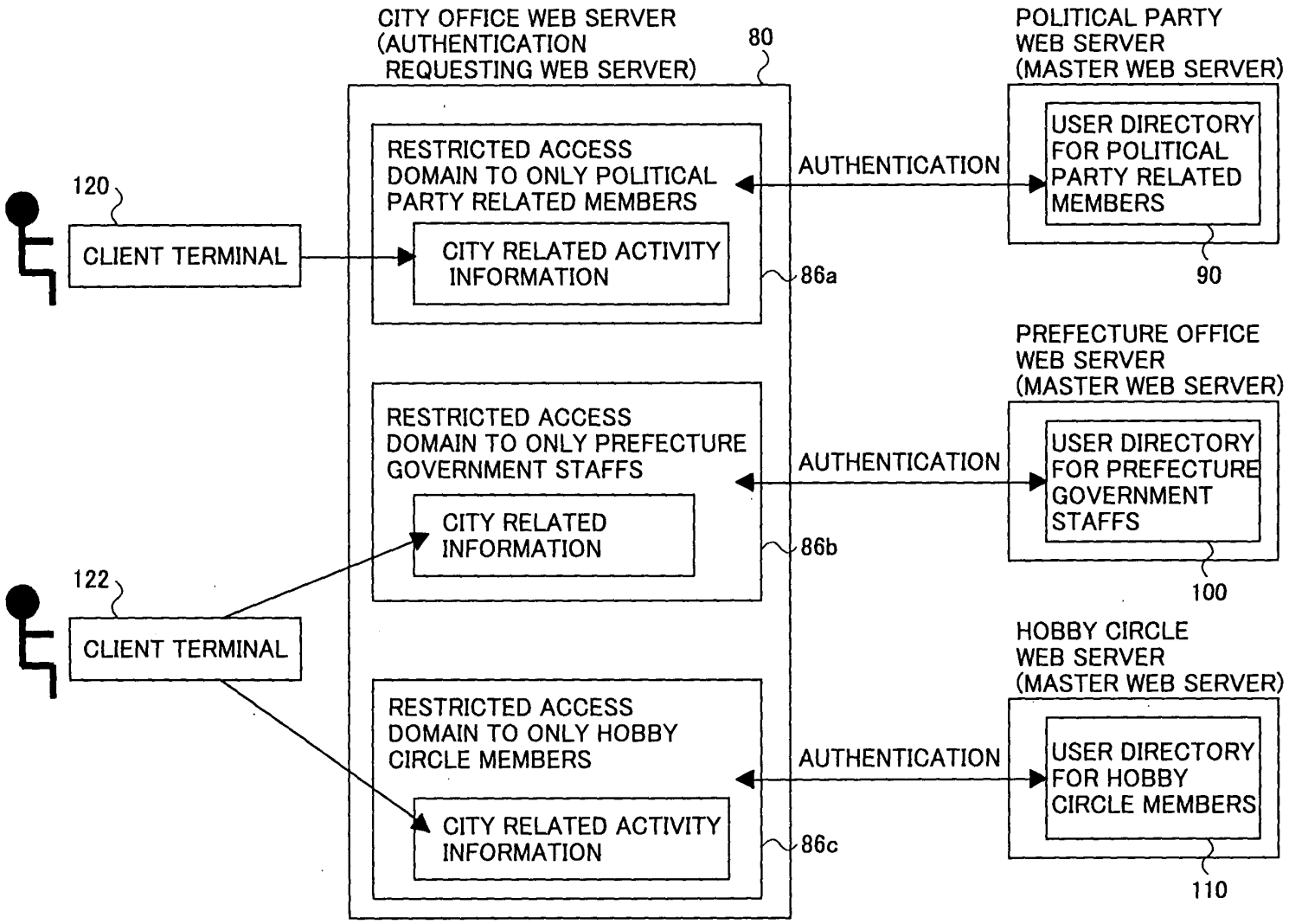
CITY OFFICE WEB SERVER
(AUTHENTICATION
REQUESTING WEB SERVER)
80
RESTRICTED ACCESS
DOMAIN TO ONLY POLITICAL
PARTY RELATED MEMBERS
CITY RELATED ACTIVITY
INFORMATION
86a
RESTRICTED ACCESS
DOMAIN TO ONLY PREFECTURE
GOVERNMENT STAFFS
CITY RELATED
INFORMATION
86b
RESTRICTED ACCESS
DOMAIN TO ONLY HOBBY
CIRCLE MEMBERS
CITY RELATED ACTIVITY
INFORMATION
86c
120
CLIENT TERMINAL
122
CLIENT TERMINAL
AUTHENTICATION
AUTHENTICATION
AUTHENTICATION
POLITICAL PARTY
WEB SERVER
(MASTER WEB SERVER)
USER DIRECTORY
FOR POLITICAL
PARTY RELATED
MEMBERS
90
PREFECTURE OFFICE
WEB SERVER
(MASTER WEB SERVER)
USER DIRECTORY
FOR PREFECTURE
GOVERNMENT
STAFFS
100
HOBBY CIRCLE
WEB SERVER
(MASTER WEB SERVER)
USER DIRECTORY
FOR HOBBY
CIRCLE MEMBERS
110

FIG.8

.htaccess (DEFINITION FORM)

AuthUserFile (PATH TO PASSWORD FILE)
AuthGroupFile (PATH TO GROUP FILE)
AuthName (SECURITY NAME)
AuthType Basic (AUTHENTICATION TYPE)
・・・ DETAILED DEFINITION OF CONTROL PATTERN・・・

.htaccess_E (DEFINITION FORM)

AuthURL (URL TO BE REFERRED)

AuthName (SECURITY NAME)
AuthType Basic (AUTHENTICATION TYPE)

.htaccess (DEFINITION EXAMPLE)

AuthUserFile/usr/apache/conf/.htaccess
AuthGroupFile/usr/apache/conf/.htaccess
AuthName Secret_Entry_01
AuthType Basic
<Limit GET>
・・・・・・・・・・・・・・・

.htaccess_E (DEFINITION EXAMPLE)

AuthURL xyz.com/secret./check.html
AuthName groupUser1